## REMARKS

In the Office Action dated July 15, 2004, claims 1-11 were rejected under §112, second paragraph, due to an informality in claim 1. This informality has been corrected in the amendments to claim 1 presented herein.

Claims 1-6, 8 and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by Buytaert. Claims 7, 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Buytaert in view of Derzay et al.

These rejections are respectfully traversed for the following reasons.

The basic purpose of the system disclosed in the Buytaert reference is to pool patient data with images on a monitor on a DLR system, which can make use of a radiology information system (RIS). The Buytaert reference, however, does not provide any details or teachings as to how the RIS interacts with the overall system, and specifically does not provide any teachings as to how, or even if, the RIS interacts with a user via display or user interface at a work station. The Buytaert reference is simply directed to exchanging text messages and displaying RIS client windows at a work station.

The acquisition system disclosed in the Buytaert reference makes use of an RIS in order to add demographic patient information to acquired images (read from RIS, write to image). The system disclosed in the Buytaert reference does not display the images for the purposes of making a diagnostic analysis thereof, but only for making a cursory check of the information content thereof and, as needed, to insert the aforementioned demographic patient information.

By contrast, the medical system architecture disclosed and claimed in the present application, as now set forth in amended claim 1, makes use of an RIS

mediator, which allows all workstations for all different imaging modalities (CT, MR, ultrasound, conventional x-ray, nuclear medicine, digital angiography, etc.) as well as multi-modality workstations, to communicate with each other. The use of a DLR system is possible in the architecture disclosed and claimed in the present application, however, this is but one example of one possible modality (for conventional x-ray systems).

For explaining the operation of the architecture disclosed and claimed in the present application, and for understanding the differences thereof with regard to the system described in the Buytaert reference, it should first be noted that an RIS contains only references to stored data. The actual data are stored in an archiving system, such as a PACS. A computer program (such as the commercially available Syngo program) must be activated by the RIS client via the RIS mediator, in order to load the referenced data from a PACS archive. For the purpose, a search for the data must be initiated, and the data, when found, then must be transferred from the archive to the work station at which the processor and interface are present. This is done under the control of the RIS mediator. Only after the requested (referenced) data are available at the processor does the RIS mediator start the application (program) selected by the RIS client, and provide the (now locally present) data to the program in order to display the necessary images. The architecture disclosed and claimed in the present application, therefore, enables a user to implement, at a single workstation (processor) the work steps selected by the RIS client and to generate the necessary results. As soon as the user has achieved a satisfactory result, the user can mark the selected task as being completed in the RIS client.

Only because all operating tools (RIS, DICOM and post-processing software) are present at a single workstation can work list jobs be read that provide the necessary data, and be processed to completion without the user having to change workstations, and without the user having to be trained to use a number of different systems.

As noted above, even though the Buytaert reference mentions the display of RIS client windows, the only teaching in the Buytaert reference that can be found as to any use that is made thereof is for the purpose of adding the aforementioned demographic patient information to the acquired images. There is no teaching or suggestion in the Buytaert reference to conduct any type of image processing or analysis, nor is there any teaching or suggestion that all necessary steps for conducting such processing and analysis can be conducted via a single workstation (processor), by making use of an RIS mediator and an RIS server with the processor being programmed as an RIS client.

The amendments to claim 1 are supported in the specification as originally filed in the description relating to Figure 5, beginning at the top of page 13 of the present specification. The RIS client software is started at the workstation, without the necessity of the use of a program developed at the software platform itself. By means of the RIS mediator, the RIS client is able to determine all programs that are available at the workstation at the start-up time, and also is able to obtain graphical symbols (icons) for each program or application, so that an optical presentation of all of the necessary icons in the user interface of the RIS client is possible. Not only is the optical integration of symbols enabled by the RIS mediator, but also the RIS mediator allows the RIS system to start these applications or programs. Moreover,

after a program or application has been started, the RIS mediator also allows the RIS client via the RIS server, to transmit the necessary references to the stored data that are needed to retrieve the stored data from an archiving location.

The Buytaert reference, therefore, does not disclose all of the elements of claim 1 as arranged and operating in claim 1, and thus does not anticipate claim 1, nor any of claims 2-6, 8 or 9 depending therefrom.

With regard to the rejection under 35 U.S.C. §103(a) based on Buytaert and Derzay et al., Applicants submit that the Derzay et al. reference describes no more than a "remote services concept" for imaging modalities, in which an application or program can be started via an icon. The icons used in the Derzay et al. reference, however, do not permit the aforementioned functions of the RIS mediator, RIS client and RIS server to be accomplished, and therefore a person of ordinary skill in the field of devising medical system architectures using an RIS has no reason to consult a reference such as the Derzay et al. reference.
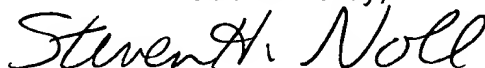
The aforementioned functions performed by the RIS mediator, the RIS client and the RIS server are exclusive to the use of an RIS, and therefore the Derzay et al. reference provides a person of ordinary skill in the field of medical system architecture design with no teachings in that area. The Derzay et al. reference therefore provides no more than generalized concepts relating to exchanging data between remote devices, and provides no guidance for embodying those teachings in, nor even any indication that those teachings can be used in, an RIS.

Moreover, the Derzay et al. reference does not provide any of the "missing" teachings discussed above with regard to the Buytaert reference, and thus even if the Buytaert reference were modified in accordance with the teachings of Derzay et

al., the subject matter of claims 7, 10 and 11 still would not result. Claims 7, 10 and 11, therefore would not have been obvious to a person of ordinary skill in the field of medical architecture design, under the provisions of 35 U.S.C. §103(a) based on the teachings of Buytaert and Derzay et al.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

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